crispprd 1.0

Abstract

Back to Hit List

Grant Number:	5R01NR001894-09
PI Name:	HOLDITCH-DAVIS, DIANE H.
PI Title:	PROFESSOR AND DIRECTOR
Project Title:	ASSESSMENT OF BIOLOGICAL/SOCIAL RISK IN PRETERM INFANTS

Abstract: *DESCRIPTION (Adapted from the Investigator's Abstract): The purposes of this study are to compare the effectiveness and clinical utility of 4 indices of biological risk in predicting the developmental and health outcomes of premature infants and to examine how these measures interact with social risks. The ultimate goal of this study is to identify infants in need of intervention. Early intervention service resources could then be targeted to infants most likely to benefit from them Specific research questions to be addressed are: effectiveness of 4 indices of biological risk -- sleeping and waking state maturation, EEG dysmaturity, neurological insults (NBRS), and visual recognition memory -- in predicting 9- and 27-month health and developmental outcomes of premature infants; relation between the indices of biological risk; interaction of the biological risk indices with social risk indices (overall quality of the environment and mother-infant interactions) in predicting 9- and 27-month developmental and health outcome of premature; and the identification of effective prediction equations for developmental and health outcomes. One hundred and thirty high-risk preterm infants from two hospitals will be recruited as soon as their medical conditions are no longer critical and will be followed until 2 years past term. During the preterm period, 2-hour state observation and respiration recordings will be conducted weekly up to 8 time and repeated at 1-month post-term. This data will be used to determine the developmental trajectories of sleep-wake states and related behaviors. EEG's will be conducted during the second, fourth and eight observations and at 1-month. Visual attention measures will be obtained at 2, 6, and 9 months. Home visits will be made at 6 and 18 months to score the HOME Inventory and videotape mother-infant interactions. Outcome measures will be the Bayley II at 9 and 27 months, a language test*

at 27 months, infant growth parameters throughout the first 2 years, and the health problems experienced by age 2. Data analysis will concentrate on determining similarities and differences in the biological risk indices, determining the degree to which biological and social risks interact to predict outcome, identifying a prediction equation for each outcome, and determining the sensitivity and specificity of these equations.

Thesaurus Terms:
child physical development, developmental psychology, disease /disorder proneness /risk, nursing intervention, outcomes research, pediatric nursing, premature infant human child behavior disorder, cognition, language development, nerve injury, psychomotor function, sleep, socioenvironment, visual perception
child (0-11), clinical research, electroencephalography, human subject, videotape /videodisc

Institution:	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL CHAPEL HILL, NC 27514
Fiscal Year:	2001
Department:	CHILDREN'S HEALTH
Project Start:	01-AUG-1988
Project End:	28-FEB-2002
ICD:	NATIONAL INSTITUTE OF NURSING RESEARCH
IRG:	NURS